

REMARKS

Claims 1-3 and 46-88 are pending in the case. The Office Action dated June 15, 2003, rejected claims 1, 49, 51, 60-62, 64, 71, and 80-82 and objected to claims 2, 46-48, 50, 52-59, 63, 65-70, 72-79, and 83-88. More particularly, the Office Action:

- objected to claims 2, 46-47, 50, 53-59, 63, 65-67, 69-70, 72-79, and 83-88 as allowable but for their dependence from rejected base claims;
- rejected claims 1, 49, and 64 as anticipated under 35 U.S.C. § 102 (b) by U.S. Letters Patent 4,409,899 ("Owen, *et al.*");
- rejected claims 60-62, and 80-82 as anticipated under 35 U.S.C. § 102 (b) by U.S. Letters Patent 4,811,308 ("Michel"); and
- rejected claims 51 and 71 as obvious under 35 U.S.C. § 103 by Owen *et al.*

Applicants respectfully traverse the rejections.

I. CLAIMS 1, 49, AND 64 ARE NOVEL OVER OWEN *ET AL.*

The Office Action rejected claims 1, 49, and 64 as anticipated under 35 U.S.C. § 102 (b) by U.S. Letters Patent 4,409,899 ("Owen, *et al.*"). Claims 1 and 64 are independent, and claim 49 depends from claim 1 such that, if claim 1 is novel, so is claim 49. An anticipating reference, by definition, must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990). Applicants respectfully submit that Rialan, *et al.* fails this standard. Applicants respectfully submit that Owen *et al.* fails to meet this standard.

In the previous Office Action, the Office made a similar rejection of several claims over Owen *et al.* Applicant presented several arguments, which Applicant believes still largely apply. However, the Office was unpersuaded.

One of Applicants' arguments was that the present invention is directed to "seismic surveying." The Office disagreed, stating that "seismic surveying" was not a part of the claims and that the limitation could not be implied from the specification. Applicants concede the principal, but dispute its application. Each of claims 1 and 64 recited "method of determining the position of a seismic sensor adapted for seismic data acquisition in a land or transition zone

environment,” which Applicants contend is the same thing. The issue is now moot, Applicants having amended claims 1 and 64 to expressly recite “seismic surveying.” However, Applicant points out that the amendment consequently does not narrow the scope of the claims.

Accordingly, the corresponding implications now directly apply. Applicants incorporate by reference their argument regarding those implications as if they were set forth herein *verbatim*. The technique of Owen *et al.*, does not anticipate because the alleged “positioning device” (identified by the Office as the airplane) not only moves at all relevant times, but it moves relatively extraordinarily. See col. 3, lines 24 – 28. Thus, the airplane is not a “positioning device” as recited in the claims and, even if it were considered such, it would render the claimed invention inoperative for its intended purpose. If the former, then the claims are not anticipated under *In re Bond*, 15 U.S.P.Q.2d (BNA) 1566, 1567 (Fed. Cir. 1990) (reference must disclose every limitation). If the latter, then the claims are also not anticipated. Cf., *United States v. Adams*, 383 U.S. 39, 50 (1966) (“An inoperable invention or one which fails to achieve its intended result does not negative novelty.”); *In re Gordon*, 221 U.S.P.Q. (BNA) 1125, 1127 (Fed. Cir. 1984) (where a modification or combination renders a prior art reference inoperative for its intended purpose, the reference teaches away from the modification or combination).

II. CLAIMS 51 AND 71 ARE ALLOWABLE OVER OWEN *ET AL.*

The Office Action rejected claims 51 and 71 as obvious under 35 U.S.C. § 103 by Owen *et al.* Applicants note that the arguments set forth above with respect to the construction of the claims and the construction are equally applicable to this rejection, and hereby incorporates them in response. That is, Owen *et al.* does not teach a method of seismic surveying or a “positioning device.” The prior art must disclose each and every element of the claimed. *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). However, Applicants raise two further arguments against this rejection.

First, Owen *et al.* is not within the scope and content of the applicable art. A reference can be asserted against the claimed invention under §103 only if (1) it is within Applicant's field of endeavor, or (2) is reasonably pertinent to the problem facing Applicant even though not within Applicant's field of endeavor. *In re Clay*, 23 U.S.P.Q.2d (BNA) 1058, 1060 (Fed. Cir. 1992). On its face, Owen *et al.* is not within the same field of endeavor as Applicants' invention, since it states at col. 1, lines 6-9:

This invention relates to target ranging and target activated munitions and in particular to an acoustic system that predicts the closest point of approach to a munition and the time of arrival thereof of a moving target and generates a munition fire signal in response thereto.

Furthermore, there is no evidence of record that one seeking to acquire seismic data in a transition zone would have reason to look at a reference on blowing up an airplane for hints. Practical considerations in operation and structure of the claimed invention and the reference evidence the distinctiveness of these two fields of endeavor. *See Clay*, 23 U.S.P.Q.2d (BNA) at 1060-61; *In re Horn*, 203 U.S.P.Q. (BNA) 969, 971 (C.C.P.A. 1979). These distinctions are at least as compelling as, if not more so, than those cited by the courts in *Clay* and *Horn*.

Second, *Owen et al.* teaches away and therefore establishes that the claimed invention is not obvious. As noted above, if you applied the technique of *Owen et al.* to seismic surveying, it would render the resulting application inoperable. Where a modification or combination renders a prior art reference inoperable for its intended purpose, the reference teaches away from the modification or combination. *In re Gordon*, 221 U.S.P.Q. (BNA) 1125, 1127 (Fed. Cir. 1984). Furthermore, it is by now well established that teaching away by the prior art constitutes *prima facie* evidence that the claimed invention is not obvious. *See, inter alia, In re Fine*, 5 U.S.P.Q.2d (BNA) 1596, 1599 (Fed. Cir. 1988); *In re Nielson*, 2 U.S.P.Q.2d (BNA) 1525, 1528 (Fed. Cir. 1987); *In re Hedges*, 228 U.S.P.Q. (BNA) 685, 687 (Fed. Cir. 1986).

Applicant therefore respectfully submits that claims 51 and 71 are allowable over *Owen et al.*

III. MICHEL FAILS TO ANTICIPATE ANY CLAIM

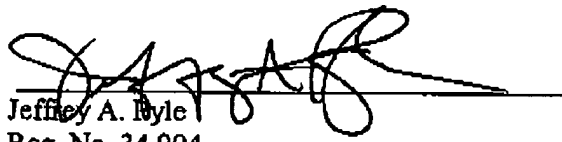
The Office Action rejected claims 60-62, and 80-82 as anticipated under 35 U.S.C. § 102 (b) by U.S. Letters Patent 4,811,308 ("Michel"). In the previous Office Action, the Office made a similar rejection of several claims over *Owen et al.* Applicants presented several arguments, which Applicant believes still largely apply. However, the Office was apparently unpersuaded, since claims 60-62 and 80-82 remain rejected as anticipated by Michel. The Office Action nevertheless did not address Applicants' arguments. Hence, Applicants incorporate those arguments herein by reference as is set forth *verbatim* and maintain their position that Michel

fails to anticipate because it fails to disclose all the limitations of the claims—namely, a “seismic survey” and a “positioning device.”

IV. CONCLUDING REMARKS

Applicants therefore respectfully submit that the claims are in condition for allowance and accordingly requests that they be allowed to issue. The Examiner is invited to contact the undersigned attorney at (713) 934-4053 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



Jeffrey A. Byle
Reg. No. 34,904

WILLIAMS, MORGAN & AMERSON
CUSTOMER NUMBER: 23720

Attorney for Applicants

10333 Richmond Dr., Suite 1100
Houston, Texas 77042
(713) 934-7000

Date: September 13, 2004